



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/757,574      | 01/15/2004  | Yasunori Mizoguchi   | X2007.0148          | 4541             |

32172 7590 08/17/2006

DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP  
1177 AVENUE OF THE AMERICAS (6TH AVENUE)  
41 ST FL.  
NEW YORK, NY 10036-2714

EXAMINER

CHAN, EMILY Y

ART UNIT PAPER NUMBER

2829

DATE MAILED: 08/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/757,574

Applicant(s)

MIZOGUCHI ET AL.

Examiner

Emily Y. Chan

Art Unit

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/12/06; 6/23/06.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 3 is objected to because of the following informalities: the recitation "inspection signals via the third wire to the contact terminal, from which the inspection signals are returned thereto as to perform measurement" is unclear because first, it is not mention that the third wire is connected to the contact terminal so that the inspection signals are sent via the third wires to the contact terminal and second it is unclear whether the inspection signals are returned from the contact terminals or not and third it is unclear whether the same inspection signals are returned. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishioka et al US patent No. 6,972,573 in view of Okawa shinichi Japan Patent application No. 2001-083214.

With respect to claim 1, Ishioka et al ('573) expressly discloses an inspection apparatus (see Fig. 2, 20) for electrical inspection of a printed board (100, 101) having a plurality of contacts (see col. 3, lines 25-26 " the probe 22 is brought in contact with

Art Unit: 2829

one of the ends of the corresponding circuit wiring 101 on the circuit board 100")

thereon, comprising:

a fixed unit (computer 21) having a control device (see Fig. 3) that controls the inspection apparatus(20);

a moving unit (sensor 1, probe 22 and selector 23) having a plurality of contact terminals (tips of probes 22) that are respectively brought into contact with the plurality of contacts (ends of the corresponding circuit wiring 101) on the printed board(100);

a plurality of first wires directly connected with the plurality of contact terminals (tips of the probe 22) in the moving unit (22, 23);

at least one connection switching device (selector 23) arranged in the moving unit and connected with the first wires for selectively switching over the plurality of first wires in response to connection switching signals ( see Col. 3, lines 11-13 " control signals");

a connection switching signal transmitter ( I/O 217) arranged inside of the fixed unit (computer 21) for transmitting the connection switching signals (control signals) (see Col. 4, lines 8-11);

a connection switching signal receiver ( switches in selector 23) arranged inside of the moving unit, for receiving the connection switching signals (control signals)(see Col. 3, lines 30-31);

a plurality of second wires connected with the fixed unit (21) and the moving unit (23, 22) for transmission of the connection switching signals (control signals) from

Art Unit: 2829

the fixed unit (computer 21) to the moving unit (23,22) (see wires connection between the computer 21 and the selector 23).

a plurality of third wires (see wires connection between the computer 21 and sensor 1), the number of which is less than the number of the first wires and which is arranged between the fixed unit (computer 21) and the moving unit (sensor 1).

Ishioka et al ('573) fail to disclose their plurality of third wires for establishing connections between the fixed unit and a part of the first wires, which are switched over by the at least one connection switching device in response to the connection switching signals.

Okawa shinichi ('214) disclose a semiconductor integrated circuit (see Fig. 1, 10) comprising a fixed unit ( terminal 13), a moving unit (11,12, 14, 15) and a plurality of first wires directly connected with a plurality of contact terminals (elements 11) in the moving unit (12). More over, Okawa shinichi ('214) exclusively teach a plurality of third wires for establishing connections between the fixed unit ( terminal 13) and a part of the first wires, which are switched over by the at least one connection switching device (selection circuit 12) in response to the connection switching signals (selection address signal from a counter section 14)(see SOLUTION " for selectively connecting the plurality of elements 11 to the terminal 13").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to incorporate the plurality of third wires of Okawa shinichi ('214) into Ishioka et al ('573)'s inspection apparatus for the expected benefit of limiting number of terminals for measuring characteristics to measure the characteristic

Art Unit: 2829

of a plurality of elements to be measured as disclosed by Okawa shinichi ('214) (see PROBLEM TO BE SOLVED).

With respect to claim 2, Ishioka et al ('573) disclose that connection switching signals are transmitted from the fixed unit (computer 21) to the moving unit (selector 23) in time-division multiplexing (see Col. 3, lines 9-10 ).

With respect to claim 3, Ishioka et al ('573) disclose that their fixed unit (computer 21 ) comprises a measurement device that sends inspection signals (see Col. 4, lines 9-11) from which the inspection signals are returned (see Fig. 3 and Col. 3, lines 22-23 " the computer 21 receives the inspection signal from the sensor 1").

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wieberdink et al US Publication No. 2004/0059970 disclose a logic device test system (see Figs 1-2) comprising a fixed unit (130 and a moving unit (110).

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emily Y. Chan whose telephone number is 571-272-1956. The examiner can normally be reached on 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ha T Nguyen can be reached on 571-272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2829

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EC  
8/8/06

  
VINH NGUYEN  
PRIMARY EXAMINER  
A-4. 2829  
08/10/06